

WHAT IS CLAIMED IS:

1. An endoluminal graft deployment catheter, comprising:  
a proximal outer tube section, having a proximal end and a distal end;  
an intermediate tube extending through the proximal tube section and  
5 beyond the distal end;  
a central core, extending through the intermediate tube; and  
a cap attached to the central core;  
wherein the central core is rotationally linked to the intermediate tube.
2. An endoluminal graft deployment catheter as in Claim 1, wherein the  
10 intermediate tube is rotationally linked to the outer tube.
3. An endoluminal graft deployment catheter as in Claim 1, wherein the cap  
is axially movable between a first position in which it contacts the outer tube and a  
second position in which it is spaced distally apart from the outer tube.
4. An endoluminal graft deployment catheter as in Claim 3, wherein the  
15 central core comprises a flexible tube.
5. An endoluminal graft deployment catheter as in Claim 4, wherein the  
tube comprises a polymeric braid.
6. An endoluminal graft deployment catheter as in Claim 5, wherein the  
tube further comprises a reinforcing element which overlaps the point of contact  
20 between the cap and the outer tube.
7. An endoluminal graft deployment catheter as in Claim 6, wherein the  
reinforcing element comprises a tubular element carried by the flexible tube.
8. An endoluminal graft deployment catheter, comprising:  
an elongate flexible body, having a proximal end and a distal end;  
25 a proximal outer tube section, having a proximal end and a distal end;  
a distal outer tube section, having a proximal end and a distal end, the  
proximal outer tube section being rotationally linked to the distal outer tube  
section; and  
a central core, extending through the proximal and distal outer tube  
30 sections;

wherein the proximal and distal tube sections define a prosthesis cavity therein for carrying a prosthesis; and axial separation of the proximal tube section from the distal tube section opens the cavity to release the prosthesis.

5 9. An endoluminal graft deployment catheter as in Claim 8, wherein each of the proximal tube section and the distal tube section is rotationally linked to the central core.

10 10. An endoluminal graft deployment catheter as in Claim 8, wherein at least one of the proximal tube section and the distal tube section is axially movable between a first position in which the cavity is closed and a second position in which the cavity is open.

11. An endoluminal graft deployment catheter as in Claim 10, comprising a junction between the proximal tube section and the distal tube section when the cavity is closed, and further comprising a reinforcing element spanning the junction.

15 12. An endoluminal graft deployment catheter as in Claim 11, wherein the reinforcing element comprises a tube.

13. An endoluminal graft deployment catheter, comprising:  
an elongate, flexible body, having a proximal end and a distal end;  
a proximal outer tube section having a proximal end and a distal end;  
a distal outer tube section, having a proximal end and a distal end;  
20 a central core, extending between the proximal outer tube section and the distal outer tube section, wherein at least one of the proximal outer tube section and the distal outer tube section is axially moveable between a first position in which the proximal outer tube section and the distal outer tube section are adjacent each other, and a second position in which the proximal outer tube section and the distal outer tube section are spaced apart, the outer tube section  
25 and the distal outer tube section forming a junction when in the first position;  
and

a reinforcing element carried by the catheter and spanning the junction.

14. An endoluminal graft deployment catheter as in Claim 13, wherein the  
30 reinforcing element comprises a tube.